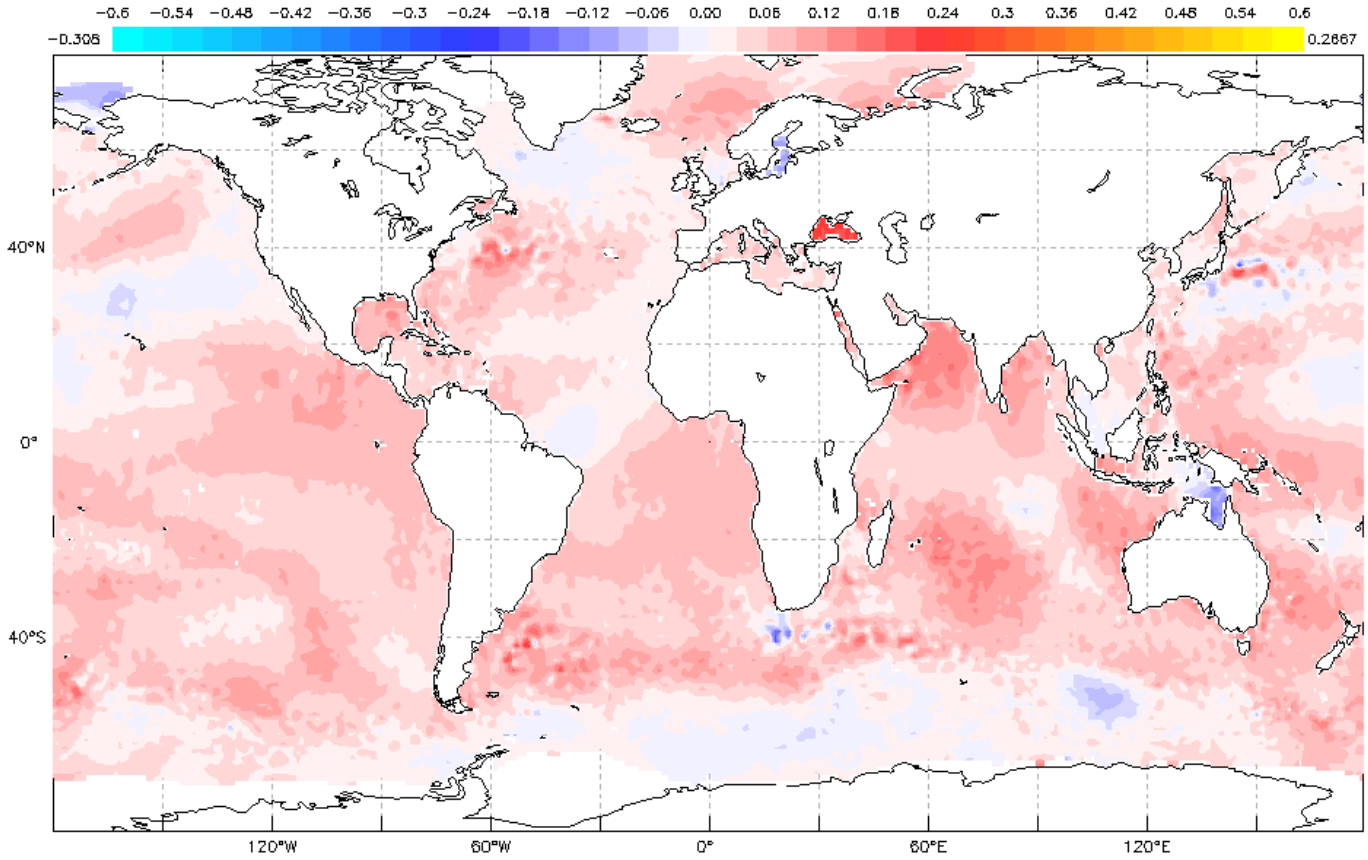
My NASA Data - Mini Lesson

Creating Your Own Sea Surface Height Model



Mini Lesson

This mapped plot below describes the anomaly of 5-day mean sea surface height, which is the difference between the measured sea surface height and the global mean sea level (the level of the sea surface if the ocean was only affected by the spin of the Earth and gravity). When it is reported that sea level is rising, it is the global mean sea level that is changing. Locally or regionally at any location, differences from the global mean sea level are a result of winds, atmospheric pressure, and local undersea topography.

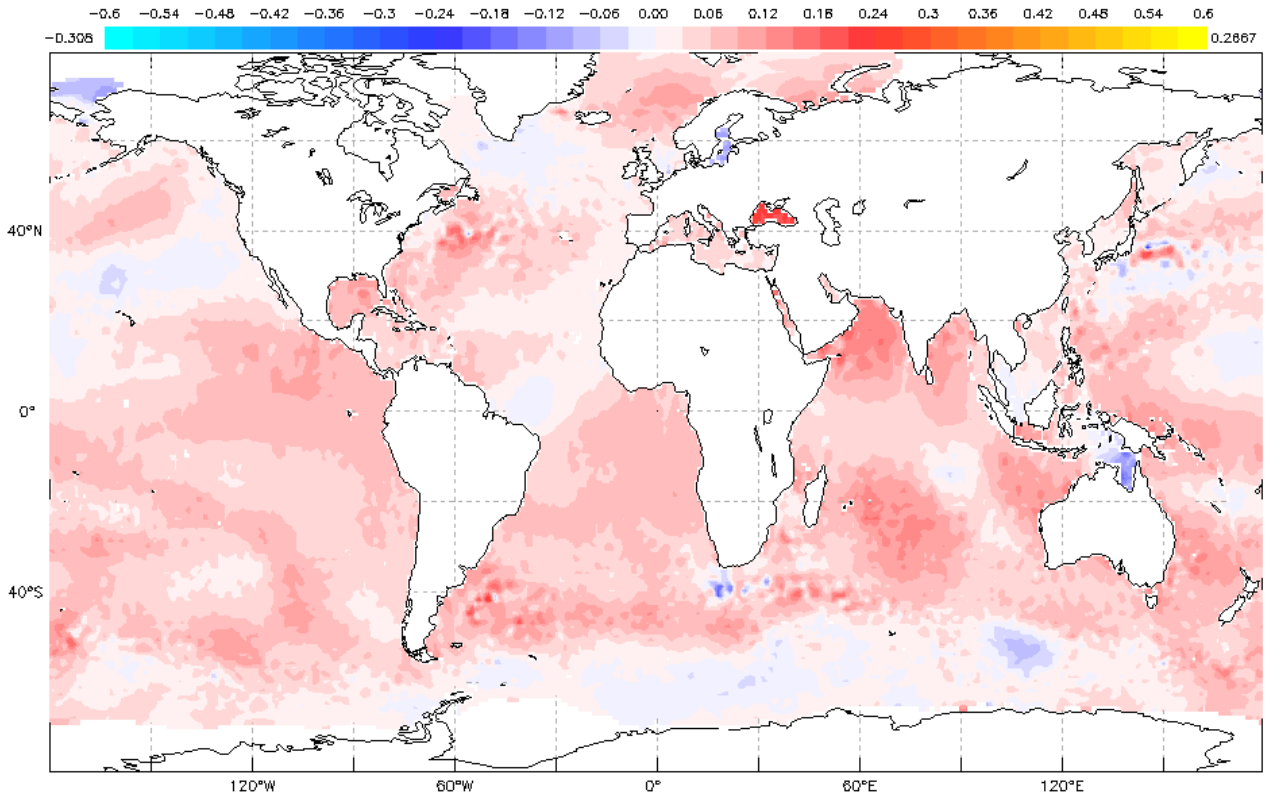
Materials Required

- Templates for Map Cubes: Map Cubes
- 1 Cube, dice, or Virtual Dice in place of dice/cubes
- 1 matching Question Sheet (A- Beginner, B-Intermediate, C-Advanced, D-ELL)
- Sea Height Data Maps pulled from the Earth System Data Explorer of the dates/ocean locations of your choice.

Engage in this mapped data using the Data Literacy Map Cubes. These cubes are useful to help you

become more familiar with and interpret the model.

1. Get ready to analyze your data with one cube, die, or virtual dice (loaded on your screen), as well as the related Cube Questions sheet/s, and mapped image.



Mapped Plot of June 2018's 5-day Mean Sea Level (Sea Surface Height) Anomaly (meters) Credit: Earth System Data Explorer

2. Roll the cube and find the matching question/number on the Cube Question sheet. They are numbered for easy matching. Answer one sub-question found under the matching main question on a sheet of paper, labeling the question with the number and letter of the question.

3. Repeat Steps 2-3 until at least 10 are answered. NOTE: Question 5.B does not pertain to this particular map. If you land on this one, skip it and roll again.

Earth System Data Explorer

- 5-day Mean Sea Level (Sea Surface Height) Anomaly (meters)